5

CLAIMS

- 1. Method for connecting a first object to a second object along a common contact surface, wherein the first object comprises at the location of the contact surface a portion for a connecting means to be applied, which portion is accessible along at least one opening in the second object, which method comprises the successive steps of:
 - (i) providing a first and a second object,
 - (ii) holding the first object against the second object along a common surface,
 - (iii) melting and atomizing particles of a material suitable as connecting means, and
- (iv) depositing along the at least one opening the material particles in molten state on the first object and on the edge zone respectively the edges of said opening, in a quantity such that in solidified state the deposited material particles form a connection between the first and the second object.
- 2. Method as claimed in claim 1, characterized in that the third step (iii) comprises arc or plasma spraying.
- 15 3. Method as claimed in claim 1, characterized in that the third step (iii) comprises powder or wire spraying.
 - 4. Method as claimed in claim 1, characterized in that the material suitable as connecting means has a melting point or an upper limit of a melting range at a temperature below 2400°C.
- 5. Method as claimed in claim 4, characterized in that the melting point or the upper limit of the melting range lies at a temperature below 600°C.

5

- 6. Method as claimed in claim 5, characterized in that the melting point or the upper limit of the melting range lies at a remperature below 150°C.
- 7. Method as claimed in claim 1, characterized in that the material suitable as connecting means contains at least one of the metals aluminum, chromium, iron, nickel, copper, zinc, molybdenum, palladium, silver, indium, tin, antimony, lead or an alloy of at least one of these metals.
- 8. Method as claimed in claim 1, characterized in that the portion of the first object accessible for the connecting means is porous, wherein the pores have dimensions such that the material deposited and solidified in the fourth step (iv) forms a mechanical connection through interlocking of this material with these pores.
- 9. Method as claimed in claim 8, characterized in that the porous portion is obtained by forming an alloy layer of a material suitable as connecting means with a portion of the first object.
- 10. Method as claimed in claim 8, characterized in that the porous portion is obtained by forming a coating layer of a material suitable as connecting means on a portion of the first object.
 - 11. Method as claimed in claim 1, characterized in that the second step (ii) is performed immediately preceding and synchronously with the third step (iii).
- 12. Method as claimed in claim 1, wherein the first object at the location of the contact surface is manufactured substantially from a metal.
 - 13. Method as claimed in claim 1, wherein the second object at the location of the contact surface is manufactured substantially from a metal.

15

20

5

- 14. Method as claimed in claim 12, characterized in that the metal is selected from the group comprising aluminum, chromium, iron, nickel, copper, molybdenum, palladium, silver, indium, gold, tungsten and an alloy of at least one of these metals.
- 15. Method as claimed in claim 1, for connecting a tubular object, for instance a liquid conduit pipe, to a gauze support structure, for instance a heat-conduit metal gauze, along a common contact surface, characterized in that in the fourth step (iv) metal particles are deposited onto the tubular object via the mesh in the gauze support.
- Convector element (6) comprising a heat-conducting metal gauze (2) and at least one liquid conduit pipe (3) connected thereto, characterized in that the liquid conduit pipe (3) is connected to the metal gauze (2) in accordance with a method as claimed in claim 1.
- 17. Method for connecting a first object to a second object along a common contact surface, wherein the first object comprises at the location of the contact surface a portion for a connecting means-to-be applied, which portion is accessible along at least one edge zone of the second object, which method comprises the successive steps of:
 - (i) providing a first and a second object,
 - (ii) holding the first object against the second object along a common surface,
 - (iii) melting and atomizing particles of a material suitable as connecting means, and
- on the first object and on the edge zone respectively the edges of said opening, in a quantity such that in solidified state the deposited material particles form a connection between the first and the second object.

Addri

Document #: 1156573 v.1